



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,300	12/08/2003	Jesse R. Miller	14140US02	3626

7590 01/05/2007
Michael B. Harlin
McAndrews, Held & Malloy, Ltd.
34th Floor
500 West Madison Street
Chicago, IL 60661

EXAMINER

CORBETT, JOHN M

ART UNIT	PAPER NUMBER
----------	--------------

2882

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/731,300

Applicant(s)

MILLER ET AL.

Examiner

John M. Corbett

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10 October 2006 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 7 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Hodges et al. (4,120,584).

With respect to claim 7, Hodges et al. teaches an apparatus comprising multiple surfaces (Figure 3, at least the top three surfaces with wire) wherein the surfaces are oriented at nonzero angles relative to one another (Figure 1).

Note: With regards to the phrase “diffraction analysis”, a claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches

Art Unit: 2882

all of the structural limitations of the claim. Therefore, the above phrase has not been given patentable weight. See MPEP 2114.

With respect to claim 12, Hodges et al. further teaches a method of x-ray diffraction analysis comprising the step of disposing samples in the apparatus (Col. 3, lines 54-58), and analyzing the samples (Col. 1, lines 6-7 and 19).

3. Claims 7-9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Gerlach et al. (4,033,904).

With respect to claim 7, Gerlach et al. teaches an apparatus comprising multiple surfaces (102) wherein the surfaces are oriented at nonzero angles relative to one another (Figures 1, 2 and 3).

Note: With regards to the phrase “diffraction analysis”, a claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all of the structural limitations of the claim. Therefore, the above phrase has not been given patentable weight. See MPEP 2114.

With respect to claim 8, Gerlach et al. further teaches wherein there are five surfaces (102).

With respect to claim 9, Gerlach et al. further teaches wherein the nonzero angles are each individually between 0.1 degrees and 20 degrees (Figure 1).

With respect to claim 11, Gerlach et al. teaches an apparatus comprising a frame (10) having multiple surfaces (102) with removable individual apparatus (20) on each surface (Figure 1).

Note: With regards to the phrase “diffraction analysis”, a claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all of the structural limitations of the claim. Therefore, the above phrase has not been given patentable weight. See MPEP 2114.

4. Claims 10 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Mack (3,148,275).

With respect to claim 10, Mack teaches an apparatus comprising a curved surface (Col. 2, lines 50-62, and Figures 2-3).

Note: With regards to the phrase “diffraction analysis”, a claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all of the structural limitations of the claim. Therefore, the above phrase has not been given patentable weight. See MPEP 2114.

Note: The phrase “capable of holding two or more samples simultaneously” is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. Furthermore, the apparatus of Mack comprising a curved surface is capable of holding two or more samples simultaneously.

With respect to claim 15, Mack further teaches a method of x-ray diffraction analysis comprising the step of disposing samples in the apparatus (Col. 2, lines 11-14), and analyzing the samples (Col. 2, lines 28-44).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hodges et al.

With respect to claim 9, Hodges et al. further teaches wherein the nonzero angles are each individually greater than 0 degrees and less than 90 degrees (Figure 3, at least the top three surfaces with wire).

Hodges et al. fails to explicitly teach wherein the nonzero angles are each individually between 0.1 degrees and 20 degrees.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Hodges et al. to include the angles between 0.1 degrees and 20 degrees, since such a modification would have only involved a mere change in working ranges and shape which involves only routine skill in the art. One would have been motivated to make such a modification to keep the sample from falling off the surface and to more easily hold the sample to the surface.

6. Claims 12-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerlach et al. as applied to claims 7, 8, 9 and 11 respectively above, and further in view of Hodges et al. (4,120,584).

With respect to claims 12-14 and 16, Gerlach et al. discloses the apparatus as recited above. Gerlach et al. further teaches the step of disposing the samples in the apparatus (Col. 2, lines 37-38) and using x-rays for analysis (Col. 4, lines 12-17).

Gerlach et al. fails to explicitly teach a method of x-ray diffraction analysis.

Hodges et al. teaches a method of x-ray diffraction analysis (Col. 1, lines 17-19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Gerlach et al. to include the x-ray diffraction analysis of Hodges et al., since these instrumental methods of analysis were art-recognized equivalents at the time the invention was made, such that one of ordinary skill in the art would have found it obvious to substitute as shown by Hodges et al. (Col. 1, lines 6-19). A person would have been

motivated to make such a modification to obtain more complete or better analysis of the surface of the sample (Col. 1, lines 6-19) as implied by Hodges et al.

Response to Arguments

7. Applicant's arguments with respect to claims 7-16 have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments filed 10 October 2006 have been fully considered but they are not persuasive.

With regards to Hodges et al., the Applicant argues that the prior art does not disclose an apparatus having multiple diffraction analysis surfaces oriented at nonzero angles. Regardless of whether this is the case or not, a claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all of the structural limitations of the claim. See MPEP 2114. Therefore, "diffraction analysis" has not been given patentable weight. In conclusion, Applicants' arguments are not persuasive, and claim 7 is rejected as indicated above.

With regards to Mack, the Applicant argues that the prior art "does not disclose an x-ray diffraction sample holder comprising a curved diffraction analysis surface capable of holding two or more samples simultaneously." Regardless of whether this is the case or not, the phrase "capable of holding two or more samples simultaneously" is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. Furthermore, the apparatus of Mack comprising a curved surface is capable of holding two or more samples simultaneously. Therefore, Applicant's arguments are not persuasive, and claim 10 is rejected as indicated above.

Art Unit: 2882

Conclusion

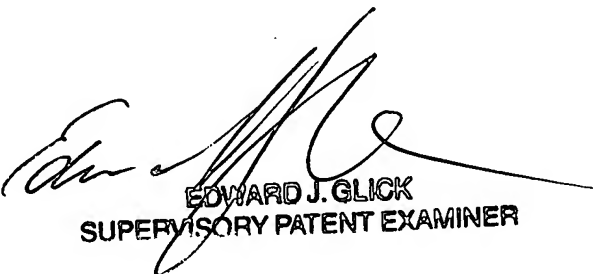
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Corbett whose telephone number is (571) 272-8284. The examiner can normally be reached on M-F 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

25 December 2006

JMC


EDWARD J. GLICK
SUPERVISORY PATENT EXAMINER

